IT IS CLAIMED:

1. A method of preventing progression of neuropathic pain in a subject, comprising administering to the subject an N-type voltage-sensitive calcium channel blocking compound which is effective (a) to inhibit electrically stimulated contraction of the guinea pig ileum, and (b) to bind selectively to omega conopeptide MVIIA binding sites present in neuronal tissue, as evidenced by the ability of the compounds to displace MVIIA from said site.

2. The method of claim 1, wherein said N-type calcium channel blocking compound is an omega-conopeptide.

3. The method of claim 2, wherein said conopeptide is selected from the group consisting of SEQ ID NO: 7 (TVIA/SNX-185), SEQ ID NO: 1 (MVIIA/SNX-111), SEQ ID NO: 30 (SNX-236), SEQ ID NO: 2 (SNX-159), SEQ ID NO: 32 (SNX-239), SEQ ID NO: 33 (SNX-199), SEQ ID NO: 35 (SNX-273), SEQ ID NO: 36 (SNX-279), and derivatives thereof.

4. The method of claim 2, wherein said conopeptide composition includes an anti-oxidant effective to prevent methionine oxidation.

5. The method of claim 1, wherein the activities of the compound in inhibition of guinea pig ileum and in binding to the MVIIA binding site are within the ranges of such activities of omega-conotoxins MVIIA and TVIA.

6. The method of claim 1, wherein said activity to bind selectively to omega conopeptide MVIIA binding sites is further evidenced by a selectivity ratio of binding at said MVIIA binding site to binding at a site 2 omega conopeptide binding site which is within the range of selectivity ratios determined for omega conopeptides MVIIA/SNX-111, SNX-199, SNX-236, SNX-239 and TVIA/SNX-185.

7. The method of claim 1, wherein said administering is by perineural application.

8. The method of claim 1, wherein said administering is by topical application to a skin region characterized by proliferation of neurite outgrowth.

9. The method of claim 1, wherein said neuropathic pain is characterized by nociceptor sensitization.

10. The method of claim 1, wherein said N-type calcium channel compound is an omega conopeptide, said administering is by epidural injection, and said treatment method further includes means for enhancing permeation of the conopeptide through meningeal membranes.

11. A stable omega conopeptide formulation comprising an omega conopeptide and an anti-oxidant composition capable of preventing methionine oxidation.

12. The formulation of claim 11, wherein the anti-oxidant composition includes a carboxylic acid buffer.

86

3 ~~13~~. The formulation of claim 2 ~~12~~, wherein the carboxylic acid buffer is lactate buffer.

4 ~~14~~. The formulation of claim 11 ~~11~~, wherein the anti-oxidant is methionine.

5 ~~15~~. The formulation of claim 1 ~~11~~, wherein the anti-oxidant composition includes lactate buffer and methionine.

6 ~~16~~. An omega-conopeptide SNX-273 having the sequence: SEQ ID NO: 35.

7 ~~17~~. An omega conopeptide SNX-279 having the sequence SEQ ID NO: 36.